

**OFFICE OF CITY AUDITOR  
EMERGENCY MEDICAL TRANSPORT  
SERVICE DELIVERY OPTIONS**

The Office of City Auditor initiated a special study of emergency medical transport services in 1999 in response to issues regarding the Seattle Fire Department's administrative arrangement with American Medical Response (AMR) for transporting basic life support (BLS) patients to medical facilities. We anticipate that the study will be released by the end of the summer, when the financial and operational data are available to complete an analysis of the Seattle Fire Department's emergency medical service costs. However, this report was prepared to provide timely reporting on emergency medical transport options for the City's consideration.

Our report considers five options for emergency transport services. The transport options include: 1) maintaining the current administrative arrangement with AMR; 2) formalizing the current administrative arrangement with AMR; 3) establishing a formal contract with an exclusive private provider through competitive request for qualifications/requests for proposal processes; 4) establishing formal contracts with multiple providers identified through competitive request for qualifications/request for proposal processes; and 5) structuring a managed competition process in which the Seattle Fire Department and private providers bid for BLS transport services. The advantages and disadvantages of these options are described below.

A summary overview of the service delivery options is presented in Appendix 1 for ease of reference and a quick comparison to avoid some redundancy in discussing the advantages and disadvantages associated with each option. Appendix 2 contains a summary overview of the EMS transport industry and the two major private providers: AMR and Rural/Metro, Inc. (Please note that other transport providers are also likely to be interested in the competitive request for qualifications/request for proposal processes.)

**Elements of Performance-Based Emergency Medical Services Contracts**

Formal performance-based contracts between public agencies and private providers are prevalent in the EMS field. In a performance-based EMS contract, the transport firm generally provides a specific commitment of performance or results in exchange for market rights or other considerations. The performance required of the contracting transport firm is clearly defined and objectively measured. The results are clearly specified. Common performance criteria for emergency transport contracts include clinical standards and response time performance and reliability in responding to patients' needs. Performance-based contracts frequently impose economic penalties for minor breaches of performance, and impose serious economic penalties, or termination of market rights, in the event of major breaches. Liability coverage and formal indemnification provisions are also common, including coverage of defense costs and legal fees connected with claims and lawsuits for damages relating to contractor operations or services. Assessment of BLS-related medical direction and contract management fees as well as equity sharing of profits generated through transport arrangements are gaining acceptance among many public and private partners.

**Option 1: Maintain Seattle Fire Department's Administrative Arrangement with American Medical Response**

AMR (formerly Shepard Ambulance) has served the greater Seattle Community since 1923 and has served as the Seattle Fire Department's exclusive provider of BLS transport services since 1976. AMR was the only Seattle-based provider with sufficient capacity to provide services throughout the City limits when the arrangement was established. Currently, AMR has six units dedicated to 911 responses within

the City limits, and access in multiple casualty emergencies to 30 additional units based in the greater Seattle-King County area and to another 20 units from surrounding counties.

Seattle Fire Department's BLS transport arrangement with AMR is straightforward and economical to administer. The Seattle Fire Department refers all calls for BLS transport services to AMR, and AMR is expected to respond to 90 percent of the requests for BLS transport service within 15 minutes of receiving a service call. Seattle Fire Department management, dispatchers and field personnel deal exclusively with one firm in arranging BLS patient transport services. Confusion regarding roles, responsibilities and territorial issues associated with multiple transport firms is avoided. In addition, the arrangement provides flexibility in resolving performance issues because neither partner is constrained by a formal contract.

The BLS transport arrangement is consistent with the City's financial policies. AMR assumes full responsibility for all the financial and operational aspects of providing BLS transport services to Seattle residents. AMR incurs the BLS transport services costs rather than the City since BLS transport services are not fully covered by the EMS levy, which is the major funding source for the Seattle Fire Department-based EMS services. AMR charges BLS patients directly for transport services and assumes all collection responsibilities, which avoids "double-billing" Seattle citizens for emergency medical services. The EMS levy, which is the predominant source of funding for Countywide emergency medical services, does not cover the full cost of BLS transports for the City of Seattle or for any regional partners.

However, the administrative arrangement does not necessarily provide the City with the best deal for BLS transport services. The Seattle Fire Department does not receive considerations that are common in formal performance-based contracts for transport arrangements. Examples of common considerations include liability coverage and hold harmless agreements for public jurisdictions, performance standards along with specified outcomes or results, enforcement provisions and penalties in the event of non-performance, established fee schedules or ceilings for service fees, and compensation for BLS-related medical direction and management oversight of contractual services.

In addition, the administrative arrangement is not legally binding and does not offer contingencies such as performance bonds or an emergency takeover period for a significant breach of service. The Seattle Fire Department does not have legal recourse in the event that AMR is no longer able or willing to provide BLS transport services. Assurance of continued services is important given the significant changes in the medical transport industry including mergers, divestitures, organizational restructuring, and pending changes in the national Health Care Finance Administration's Medicare Ambulance Fee Schedule. More importantly, if a contract is not in effect to provide for an orderly transition of service providers in the event of a major breach, Seattle residents may be denied transport while alternative BLS transport arrangements are developed.<sup>1</sup>

The administrative arrangement is inconsistent with the City's contracting and ethics policies. AMR generates profits annually through Seattle Fire Department referrals of BLS patients requiring transport services, and may no longer be the sole firm with sufficient capacity to provide BLS transport services throughout the Seattle City limits. Other firms outside the Seattle or greater Puget Sound area may also be interested in contracting with the City for transport services. City contracting policy generally requires operating departments to solicit competitive bids or proposals from multiple firms, and the ethics policy requires equitable treatment of firms conducting business, or interested in conducting business, with City departments.

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<sup>1</sup>Although concerns have been raised about potential disruptions in transport service due to industry changes, it is important to note that this has not been an issue in the local Seattle market.

## **Option 2: Formalize Seattle Fire Department's Administrative Arrangement with American Medical Response**

The long-standing administrative arrangement between the Seattle Fire Department and AMR is unique and could potentially be considered as a basis for a sole source contract. AMR has established the extensive infrastructure required to provide BLS transport services for Seattle residents, and has developed successful working partnerships with the Seattle Fire Department and local medical community. However, legal research would be required to determine whether this is a prudent option given antitrust and civil rights litigation brought about by ambulance firms denied the right to conduct business in major markets due to exclusive EMS transport arrangements between public agencies and private firms.

The advantage of formalizing the administrative arrangement is that a contract would be legally binding and could provide liability coverage, performance standards and results, enforcement mechanisms, and potential resources for medical supervision and contract management functions. Continued access to transport service would be assured in the event of future ambulance industry shakeups or serious breaches of contract. Formalizing the administrative arrangement would also provide continuity in daily BLS transport operations as the Seattle Fire Department and AMR would maintain their successful working relationship.

A significant disadvantage of formalizing the administrative arrangement with AMR is that the City would be unable to determine whether it maximized the public benefits possible through a competitive contracting process. Research on public private partnerships clearly documents that the best deals for public partners are achieved through competitions involving multiple firms. Competition encourages innovative and cost-saving approaches in the development of proposals and ultimately the final contract. In addition, the research identifies circumvention of competitive contracting processes as a common cause of contractual failures. Pre-selected firms generally receive more favorable contract terms and have more latitude to promote private, corporate interests rather than the public service objectives.

## **Option 3: Establish Formal Performance-Based Contract with a Private Provider Through Competitive Request for Qualifications/Request for Proposal Processes**

In addition to the contractual benefits described above, the American Ambulance Association's *Contracting for Emergency Ambulance Services: Guide to Effective System Design* describes the following benefits associated with performance-based contracting. Examples of benefits (shown in italics) and their relevance to a City performance-based contract for BLS transport services include:

- *Improving service quality by decreasing response times with the same or fewer ambulance resources, ensuring that quality of care standards are objectively and externally monitored, and integrating responder agencies into the system's standard of care.* Seattle Medic One has established high quality of care standards that need to be maintained by any prospective BLS transport contractor. However, response time improvements would be desirable for the Seattle Fire Department so that fire suppression personnel and equipment responding to EMS calls are returned to service more rapidly.
- *Generating substantial total system cost savings by taking advantage of economies of scale, particularly in multi-jurisdictional markets, introducing competition through periodic price and quality comparisons, and encouraging cost saving innovations.* AMR has generated substantial revenues and profits through the Seattle Fire Department's 911 referrals. A formal contract would provide opportunities for the Seattle Fire Department to directly benefit from those referrals and system profits by requiring the contractor to absorb BLS-related medical supervision and contract

management expenses and through innovative provisions for equity or profit sharing. An equity share of \$1.7 million was generated through the City of San Diego and Rural/Metro contract in 1999.

- *Reducing the burden on local taxpayers to fund services by maximizing third-party reimbursements, successfully managing accounts receivables, utilizing pricing strategies that offset the need for subsidies, and providing an incentive for efficient operation because of retention of market rights.* A performance-based contract would have a negligible effect on the Seattle taxpayers because BLS transport expenses are currently financed through user fees rather than the EMS levy. However, contractual efficiencies that generate profits or equity that can be shared by both partners and faster response times would significantly benefit City residents and the Seattle Fire Department. Again, more efficient BLS responses from private providers would allow more rapid release of Seattle Fire Department equipment, which would then be available for other incoming (and potentially life-threatening) emergencies.
- *Reduce local government liability for EMS services by establishing proper system design, transferring operational risk of liability from local government to a private firm, and implementing performance security provisions.* As noted earlier, the liability coverage and performance security provisions would be an important benefit to the Seattle Fire Department in establishing a performance-based contract.

It should be noted that performance-based contracting would require the Seattle Fire Department to provide continuous monitoring of performance to ensure that the level of clinical skills, response time performance, costs and other contractual objectives are met. Often public partners do not have the business management skills (cost accounting, collections, contract management, etc.) to provide effective oversight of all the aspects of performance-based contracts. In fact, audits of EMS operations often cite poor contract monitoring and oversight practices as a crucial factor in avoiding or correcting contractual failures. A performance-based contract could cover the costs associated with the Seattle Fire Department's contract management responsibilities, which is important because the Department does not have sufficient administrative personnel to routinely monitor a BLS contractor's performance.

#### **Option 4: Establish Formal Contracts With Multiple Private Providers Through a Competitive Request for Qualifications/Requests for Proposal Process**

Option 3 elaborates on the potential benefits of the Seattle Fire Department establishing a performance-based contract for BLS transport services. Many of those benefits would be available regardless of whether the Seattle Fire Department contracts with an exclusive provider or multiple providers for transport services.

However, economies of scale are often sacrificed in arrangements with multiple service providers as more resources are generally required to respond to fewer calls for services. Transport contractors operating in the Seattle market will also be required to make operational and financial adjustments in response to the Health Care Finance Administration's new Medicare reimbursement schedule in January 2001. The new fee schedule will be lower than the old fee schedule in the Seattle market, and transport firms will no longer be able to itemize BLS transport costs other than mileage. This will result in reduced revenues for the contractor selected to provide BLS transports. While multiple providers may promote greater opportunities for creative competition during the life of the contract, third party insurance companies generally look for economies of scale along with consistent performance. It will also be important to ensure that quality of care standards are not impacted by zealous competition or cost-savings strategies.

Contracts with multiple providers will require more administrative time and more sophisticated business management skills to ensure that operational burdens and economic rewards are equitably distributed. A

simple geographic split of the Seattle market into north-south boundaries managed by different vendors is not possible due to economically diverse populations in each area and due to neighborhood characteristics such as wider roadways that impact service delivery. One financial indicator that reflects the diversity of the neighborhoods is the collections rate for transport services, which tends to be ten percent higher for north Seattle residents than the collections rate for south Seattle residents. To achieve equity for multiple firms, the Seattle Fire Department will be required to split the BLS transport market through a call rotation system or other arrangements that are likely to be more complex to administer.

### **Option 5: Structuring a Managed Competition Process in Which the Seattle Fire Department and Private Providers Bid for Emergency Transport Services**

An increasing number of public agencies are now providing medical transport services. Uncertainty in the private transport industry, more direct control of the quality (continuity) of care, and economics have been important factors for public agencies in determining whether to provide BLS transport services in-house. Medical transport services generate their own revenue stream not only to support essential medical services, but to create employment opportunities for personnel in the public and private sectors.

The merits of fire-based vs. private industry EMS services have been the subject of much debate and extensive study by the International Association of Firefighters and the American Ambulance Association. The following exhibit displays the topics that have become the focus of the debate, highlighting the International Association of Firefighters position.

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**Exhibit 1**  
**Comparison of Fire-Based vs. Private**  
**Service Control Comparison**

<b>Fire-Based</b>	<b>Private</b>
Optimum Response Times	Unacceptable Response Times
Average Fee Structure	Top of Scale Fee Structure
Must Respond in All Situations	Option to Not Respond in Select Circumstances
Cannot Strike	Potential for Employee Strike
Traditional and Dependable	Dependency on Service Contracts; May Be Less Stable
Citizen Control	Stockholder Control
Stable Employees; Low Turnover	Higher Turnover Rates
Public Service Orientation	Profit Orientation

Source: International Association of Fire Fighters, *Charting the Future of Fire-Based EMS*, 1997.

The above matrix provides a rationale to encourage public agencies to assume the responsibility for medical transports based upon public service objectives. Fire-based EMS systems also have the advantage of dual-trained personnel, who provide fire fighting services as well as perform various tasks and duties other than EMS. In addition, the quality of care provided by public agencies is generally considered superior to the care provided by private firms due to employee stability and continuous training requirements.

However, private transport providers have taken the lead in developing cheaper and faster service delivery methods. In fact, the Seattle Fire Department may be required to engage in a substantial reengineering process to become competitive with private providers such as AMR and Rural/Metro. Private transport firms have personnel compensation and benefit packages that range from 25 to 50 percent less than public employee benefit and compensation packages. Compensation and benefits in

both the public and private sector typically comprise 80 percent of the expenses associated with fully equipping, staffing and operating aid units for BLS transport services. One example that illustrates the impact of personnel expenses on service delivery is that the annual cost of a City of Seattle fully equipped and staffed aid unit<sup>2</sup> is approximately \$1.35 million compared to \$400,000 to \$500,000 for a private firm.

In addition, private transport firms have developed efficient service delivery methods that would need to be considered by the Seattle Fire Department. Private providers, including AMR and Rural/Metro, generally utilize status system management systems, which allows for more efficient use of resources through variable staffing and deployment practices. Specifically, personnel and equipment are scheduled by hour of the day, day of the week, historical demands for services and demand based upon geographic consideration in the service area. Private firms also deploy resources from strategic field locations. Most public agencies, including the Seattle Fire Department, operate static delivery systems, with uniform shift changes and uniform unit deployment from fixed based facilities that are considered necessary due to their dual fire suppression and EMS responsibilities.

The Seattle-King County Department of Public Health EMS Medical Services has completed regional studies that address the need to identify funding alternatives to reduce the reliance on levy-generated revenues and the need to implement system efficiencies to respond to the increasing demands for ALS and BLS services. One initiative considered for County-wide expansion is to implement “telephone referral triaging” of low risk calls to a designated 24-hour, nurse-staffed telephone line in an attempt to decrease unnecessary BLS transports and emergency department visits. The Seattle Fire Department is also currently developing a similar telephone referral system as well as considering future funding alternatives and alternative service delivery methods to enhance its service efficiency.

### **Public-Private Managed Competitions**

The Seattle Fire Department has also expressed interest in the past about participating in a competition for basic life support transport services, so information was gathered on effective managed competitions for public-private agencies. Effective public-private competitions allow government to leverage the creativity and efficiency of the private sector to deliver public goods or services. Public-private competitions generally allow public agencies to free up revenues to support new initiatives or expand existing services. Competitions have been developed to cover a variety of collaborative arrangements between government and the private sector, including arrangements for emergency transport services.

The American Ambulance Association has identified eight essential performance measures for evaluating EMS systems. These measures include the level of clinical capability and reliability; level of response time performance and reliability; cost per response; cost per unit hours; productivity (unit hour utilization ratio); total system cost per capita; local tax subsidy per capita; and subsidy/price trade-offs. These measures would serve as useful criteria for a managed competition with a public agency and private transport firms.

Maintaining a level playing field is important in contracting for emergency transport services, particularly when an internal agency will be involved in a competitive process with contractors. The appearance of fairness is crucial due to the common occurrence of performance issues associated with emergency transport contracts. For example, contracting agencies are often unable (or unwilling) to meet contractual response times in isolated or low-income areas due to economic factors. If the contractual scope of services does not provide reasonable economic incentives and the opportunity to succeed, the likely result will be service disruptions for citizens. Potential legal issues could also surface if contractors do not

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<sup>2</sup>This cost comparison is for a fully equipped and staffed ALS unit because BLS unit costs were not available.

perceive that the competition process was equitable or that the City is an effective partner in delivering transport services.

It is interesting to note that the County of San Diego created an Office of Managed Competition to ensure that viable requests for proposals and equitable processes were developed for competitions involving both contractors and internal agencies. The Office of Managed Competition provided adequate information to all prospective competitors throughout the competition process. Contracting agencies were given information about the internal operations, major functions, activities and tasks. County agencies were educated on competitive contracting processes, cost accounting skills, and given best practices and benchmarking information on successful business structures and operations.

More importantly, the Office of Managed Competition was responsible for maintaining equity in the process to ensure that internal agencies did not have an unfair advantage in developing competitive bids. For example, the Office of Managed Competition did not communicate formally or informally with internal agencies about the detailed requests for proposals. In addition, the Office of Managed Competition received and evaluated the proposals with the assistance of independent, expert panels. Labor organizations were also included in the review of the draft request for proposal prior to the competition.

The Contracting Services Division in the Executive Services Department would be the appropriate agency to develop a managed competition for emergency transport services if the Seattle Fire Department is involved in a future competition process with a private vendor. Regardless of whether the Seattle Fire Department participates in the competitive process and whether consultants have a role in framing the proposals, the Contracting Services Division is knowledgeable about the City's contracting process and will have an important role in ensuring a level playing field for all prospective BLS contractors.

## APPENDIX 1

### OVERVIEW OF TRANSPORT OPTIONS ADVANTAGES AND DISADVANTAGES

The matrix below provides a brief overview of transport options and highlights the relative advantages and disadvantages of the various options. The ranking system for the matrix is as follows:

Very Good = ✓ ✓ ✓  
Good = ✓ ✓

Fair = ✓  
Poor = --

Advantages and Disadvantages	Maintain Administrative Arrangement	Formalize Administrative Arrangement	Contract with Single Private Provider	Contract with Multiple Providers	Public-Private Managed Competition
Ease of Administration	✓ ✓ ✓	✓ ✓	✓ ✓	--	✓
Measurable Performance Standards/Results	✓	✓	✓ ✓ ✓	✓ ✓	✓ ✓ ✓
Indemnification/Liability	--	✓	✓ ✓	✓ ✓	*
Enforcement/Penalties	--	✓	✓ ✓	✓ ✓	✓ ✓
Serious Breaches Provisions	--	✓	✓ ✓	✓ ✓ ✓	✓ ✓
Assurance of Best Deal	--	--	✓ ✓ ✓	✓ ✓	✓ ✓ ✓
Fee Schedules/Ceilings	--	✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓
Medical/Contract Supervision	--	✓	✓ ✓ ✓	✓ ✓	✓ ✓ ✓
Equity Sharing	--	✓	✓ ✓ ✓	✓	✓ ✓ ✓

\*Note: If the Seattle Fire Department prevailed in the managed competition, the City would assume risk management responsibilities. In fact, many advantages and disadvantages are altered or no longer relevant if the Seattle Fire Department assumed sole responsibility for the BLS transport operations.



## APPENDIX 2

### OVERVIEW OF EMS TRANSPORT INDUSTRY AND TWO MAJOR PRIVATE PROVIDERS

#### **EMS Transport Industry Overview**

Public sector agencies, such as the Seattle Fire Department, generally serve as the first responder to requests for emergency services in most communities. These public agencies include municipal fire departments and tax-supported fire districts. However, even when public agencies serve as the first responder, private ambulance, hospital and volunteer organizations frequently provide transport services.

Increased demand for emergency medical services in the City of Seattle and across the country is attributed to population growth and aging, the availability of the 911 services, public education programs on its use, and the practice of certain citizens using emergency rooms as the primary source of medical care. In response, public and private medical transport providers have acquired more sophisticated emergency medical, dispatch, and management systems to satisfy prompt response times and quality of care assurance criteria required by state and local jurisdictions for emergency medical services. Annual EMS expenditures in the United States were estimated to be between \$4 and \$7 billion in 1999.<sup>3</sup>

The medical transport industry has been unstable as evidenced by takeovers, divestitures, consolidations, and organizational restructuring. Profits generally average between seven and eight percent annually within the medical transport industry, which is less attractive to investors than other industry earnings. Stock prices for both companies have recently plummeted from highs in the \$30 dollar range to 38 cents for Laidlaw (AMR's parent company) and \$1.58 for Rural/Metro. Nevertheless, AMR and Rural/Metro both indicated that their West Coast operations are profitable and sufficient revenues are generated to fund day-to-day operations. AMR has also continued to implement its capital program in the Seattle area, and expects to take delivery on 14 new ambulances, valued at \$940,000, during the next few months.

#### **Overview Of American Medical Response**

American Medical Response (formerly Shepard Ambulance/Shepard Lifefleet) is the nation's largest provider of medical transportation. AMR provides a full-range of medical transportation services from basic patient transit to the advanced emergency care and pre-hospital assistance with more than 22,000 staff nationwide. American Medical Response provides transport services to over six million patients annually in 253 operating sites with a fleet of 5,000 vehicles. During 1999, American Medical Response transported more than 20,000 Seattle BLS patients in response to calls originating from the 911 system.

#### **Overview of Rural/Metro Corporation**

Rural/Metro Corporation (Shannon Ambulance in Seattle) is the second leading provider of emergency ambulance services in the United States. Rural/Metro offers general medical transportation, specialty safety and fire protection services, and other health care services throughout the nation. Rural/Metro, which was established in 1958, now employs more than 12,000 people and serves more than 450 communities. Currently, Rural/Metro provides basic life transport services within King County (outside the City of Seattle), and in Snohomish and Pierce Counties. In 1999, Rural/Metro began to express interest in competing with American Medical Response for BLS transport services within the Seattle community.

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<sup>3</sup>Rural/Metro Corporation 1999 Annual Report: 911 Ambulance Services, General Medical Transport, Safety & Fire Protection, and Healthcare Logistics, September, 1999.